

18-15-01

Practitioner's Docket No. 712-002.107

PATENT

Preliminary Classification:

Proposed Class:

Subclass:

NOTE:

"All applicants are requested to include a preliminary classification on newly filed patent applications." The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand comer of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129." M.P.E.P. § 601, 7th ed.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Box Patent Application Assistant Commissioner for Patents Washington, D.C. 20231

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s): David G. Bellemore, David R. Fournier, Michael A. Davis

WARNING: 37 C.F.R.§ 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(I) is filed supplying or changing the name or names of the inventor or inventors."

For (title): METHOD FOR REDUCING SKEW IN A REAL-TIME **CENTROID CALCULATION**

CERTIFICATION UNDER 37 C.F.R. § 1.10*

(Express Mail label number is mandatory) (Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service on this date, August 14, 2001, in an envelope as "Express Mail Post Office to Addressee," mailing Label Number EL 762 541 359 US, addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

Judith R. Schick

(type or print name of person mailing pape

Signature of person mailing paper

WARNING: Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 cannot

be used to obtain a date of mailing or transmission for this correspondence.

WARNING: Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing

label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at

56,442.

1.	Тур	oe c	of Application
	Thi	s ne	ew application is for a(n)
			(check one applicable item below)
	X	Or	iginal (nonprovisional)
		De	esign
			Plant
WA	RNIN	IG:	"Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. § 37(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-in-part application.
WA	RNIN	IG:	Do not use this transmittal for the filing of a provisional application.
NO:	TC.	IE .	one of the following 2 Home and, then complete and attach ADDED DAGED FOR NEW

NOTE: If one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION.

☐ Divisional☐ Continuation☐ Continuation-in-part (C-I-P)

2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121)

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. § 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designated the United States of America; or
- (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120,121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 199, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

WARNING:		When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).								
		The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.								
3.	Papers	Enclosed								
	(De _10 P _3 P	quired for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 esign) Application ages of specification ages of claims heets of drawings								
	WARNIN	G: DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. For comments on proposed then-new 37 C.F.R. § 1.84, see Notice of March 9, 1988 (1990 O.G. 57-62).								
	NOTE:	"Identifying indicia, if provided, should include the application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawing a minimum distance of 1.5 cm (5/8 inch) down from the top of the page " 37 C.F.R. § 1.84(c)).								
		(complete the following, if applicable)								
	0	The enclosed drawing(s) are photograph(s). Three (3) sets of photographs and a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)" are attached. 37 C.F.R. § 1.84(b). The enclosed drawing(s) are in color. Three (3) sets of color drawings and a "PETITION TO ACCEPT COLOR DRAWING(S)" are attached. 37 C.F.R. §§ 1.84(a)(2) and 1.84(b). formal informal								
	B. Oth	ner Papers Enclosed								
	1 Pa	ges of declaration and power of attorney ges of abstract ner (Title Page)								
4.	Additio	onal papers enclosed								
		Amendment to claims								
		□ Cancel in this application claims before calculating the filing fee. (At least one original independent claim must be retained for filing purposes.) □ Add the claims shown on the attached amendment. (Claims added have been numbered consecutively following the highest numbered original claims.)								
		Preliminary Amendment								
		Information Disclosure Statement (37 C.F.R. § 1.98)								
		Form PTO-1449 (PTO/SB/08A and 08B)								
		Citations								

5.

		Sub per	miss tainir	sion c	f "Se reto f	quenc		ng," (and/or amen eotide and/or	
_		Aut Rep	horiz orese	ation entativ Comr	of re		ney(s)	to	Accept	and	Follow	Instructions	from
		Oth		COIIII	Herita								
5. [Dec	lara	ation	or o	ath (ii	ncludi	ng pov	ver o	of attorne	y)			
NOTE:		A newly executed declaration is not required in a continuation or divisional application provided that the prior nonprovisional application contained a declaration as required, the application being filed is by all or fewer than all the inventors named in the prior application, there is no new matter in the application being filed, and a copy of the executed declaration filed in the prior application (showing the signature or an indication thereon that it was signed) is submitted. The copy must be accompanied by a statement requesting deletion of the names of person(s) who are not inventors of the application being filed. If the declaration in the prior application was filed under § 1.47, then a copy of that declaration must be filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning person under § 1.47 has subsequently joined in a prior application, then a copy of the subsequently executed declaration must be filed. See 37 C.F.R. §§ 1.63(d)(1)-(3).											
NOTE:		A declaration filed to complete an application must be executed, identify the specification to which it is directed, identify each inventor by full name including family name and at least one given name, without abbreviation together with any other given name or initial, and the residence, post office address and country or citizenship of each inventor, and state whether the inventor is a sole or joint inventor. 37 C.F.R. § 1.63(a)(1)-(4).											
NOTE	Ē:	"The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(I) is filed supplying or changing the name or names of the inventor or inventors." 37 C.F.R. § 1.41(a)(1).											
		X	End	osed									
			Exe	ecuted	by								
						(cł	neck al	l app	licable bo	oxes)			
			lega join	t inve	esent	or pers	on sho	owing	s). 37 C.F g a propri e reached	ietary i		1.43. on behalf of ir	oventor
												and the sta em 13 below f	
			Not	Enclo	osed								
NOTE	≣:	the may FOI	U.S. a / be ti	applicated a W AP	ion coi as a co	ntains su Intinuatio	ibject m on or coi	atter ii ntinua	n addition to tion-in-part,	the Inte	rnational A case may b	r where the comp application, the ap e, utilizing ADDE OR U.S. APPLI	plication D PAGE
									rson auth ed invento		under 37	7 C.F.R. § 1.4	1(c) on

(The	deci	aration or oath, along with the surcharge required by 37 C.F.R. § 1.16(e) can be filed subsequently).
		☐ Showing that the filing is authorized. (not required unless called into question. 37 C.F.R. § 1.41(d))
6. In	vento	orship Statement
WARNII	NG:	If the named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted.
The in	vento	orship for all the claims in this application are:
X	The	e same.
		or
		Not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made, is submitted.
		will be submitted
7. La	ingua	age
NOTE:	An a An . requ	application including a signed oath or declaration may be filed in a language other than English. English translation of the non-English language application and the processing fee of \$130.00 vired by 37 C.F.R. § 1.17(k) is required to be filed with the application, or within such time as may set by the Office. 37 C.F.R. § 1.52(d).
	\boxtimes	English
		Non English
		The attached translation includes a statement that the translation is accurate.
		37 C.F.R. § 1.52(d).
8. As	ssign	ment
	X	An assignment of the invention to CiDRA CORPORATION
		 ☑ is attached. A separate ☐ "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or ☐ FORM PTO 1595 is also attached. ☐ will follow.
NOTE:		an assignment is submitted with a new application, send two separate letters-one for the lication and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).
WARNI	NG:	A newly executed "CERTIFICATE UNDER 37 C.F.R. § 3.73(b)" must be filed when a continuation-in-part application is filed by an assignee. Notice of April 30, 193, 1150 O.G. 62-64.
	Thi	is is a continuation divisional application and the assignment
do	cum	ent for the parent application 0 / was filed on
		·
		Reel
		Eromo

(New Application Transmittal [4-1] page 5 of 11)

	rtified Copy rtified copy(ies) of applic	cation(s)			
Co	untry	Appln. I	Vo.		Filed
Co	puntry	Appln. I	No.		Filed
Co	ountry	Appln. I	۷o.		Filed
from w	hich priority is claimed				
	□ is (are) attached.□ will follow.				
NOTE:	The foreign application form declaration. 37 C.F.R. § 1.5		clair	n for priority m	ust be referred to in the oath o
NOTE:	U.S. application or Internation § 120 is itself entitled to price	onal Application from w prity from a prior foreig PLICATION TRANS	vhici n ap	h this application plication, then	ed directly relates. If any parer n claims benefit under 35 U.S.C complete item 18 on the ADDE BENEFIT OF PRIOR U.S
10. Fe	e Calculation (37 C.F.F	R. § 1.16)			
A.	区 Regular applic	ation			
		CLAIMS AS	FIL	ED	
Numbe	er filed	Number Extra		Rate	Basic Fee 37 C.F.R. § 1.16(a) \$710.00
Total 0 (37 C.I	Claims F.R. § 1.16(c)) 10-20 =	0	x	\$18.00 =	
	endent Claims F.R. § 1.16(b)) 2 - 3 =	0	x	\$80.00 =	
	e dependent claim(s), (37 C.F.R. § 1.16(d))		+	\$270.00	
	☐ Amendment cance☐ Amendment deleti☐ Fee for extra claim	ng multiple-deper	ide	ncies is encl	osed.
NOTE:		piration of the time pe	riod	set for respon	paid or the claims canceled t se by the Patent and Tradema
		Filing Fee Calc	ulaf	tion	\$710.00
	B. □ Design application (\$310.00 – 37)	ation C.F.R. § 1.16(f))			

Filing Fee Calculation

	C.	☐ Plant application
		(\$480.00 - 37 C.F.R. § 1.16(g))
		Filing Fee Calculation \$
11. Sm	all E	Entity Statement(s)
		tement(s) that this is a filing by a small entity under 37 C.F.R. §§ 1.9 and 1.27 are) attached.
WARNING	G:	"Status as a small entity must be specifically established in each application or patent in which the status is available and desired. Status as a small entity in one application or patent does not affect any other application or patent, including applications or patents which are directly or indirectly dependent upon the application or patent in which the status has been established. The refiling of an application under § 1.53 as a continuation, division, or continuation-in-part (including a continued prosecution application under § 1.53(d)), or the filing of a reissue application requires a new determination as to continued entitlement to small entity status for the continuing or reissue application. A nonprovisional application claiming benefit under 35 U.S.C. § 119(e), 120, 121, or 365(c) of a prior application, or a reissue application may rely on a statement filed in the prior application or in the patent if the nonprovisional application or the reissue application includes a reference to the statement in the prior application or in the patent or includes a copy of the statement in the prior application or in the patent and status as a small entity is still proper and desired. The payment of the small entity basic statutory filing fee will be treated as such a reference for purposes of this section." 37 C.F.R. § 1.28(a)(2).
WARNIN	G:	"Small entity status must not be established when the person or persons signing the statement can unequivocally make the required self-certification." M.P.E.P., \S 509.03, 6^{th} ed., rev. 2, July 1996 (emphasis added).
		(complete the following, if applicable)
		☐ Status as a small entity was claimed in prior application
		35 U.S.C. § □ 119(e),
		□ 120,
		□ 121,
		□ 365(c),
		and which status as a small entity is still proper and desired.
		☐ A copy of the statement in the prior application is included.
		Filing Fee Calculation (50% of A , B , or C above)
		\$
<i>NOTE:</i>	fi e	iny excess of the full fee paid will be refunded if a small entity statement and a refund request are led within 2 months of the date of timely payment of a full fee. The two-month period is not xtendable under § 1.136. 37 C.F.R. § 1.28(a). st for International-Type Search (37 C.F.R. § 1.104(d))
	•	(complete, if applicable)
_		
	Ple wh	ease prepare an international-type search report for this application at the time en national examination on the merits takes place.

13.	Fee	Pa	yment Being Made at This Time	
1		No	t Enclosed	
			No filing fee is to be paid at this time. (This and the surcharge required by 37 C.F.R. § 1.16(e) can subsequently.)	n be paid
	X	End	closed	
		X	Filing fee	\$ 710.00
		X	Recording assignment (\$40.00 – 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION.")	\$40.00
			Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached. (\$130.00 - 37 C.F.R. §§ 1.47 and 1.17(i))	\$
			For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k))	\$
			Processing and retention fee (\$130.00, 37 C.F.R. §§ 1.52(d) and 1.21(l))	\$
			Fee for international-type search report (\$40.00; 37 C.F.R. § 1.21(e))	\$
NOT	E:	for to app	C.F.R. § 1.21(I) establishes a fee for processing and retaining any application failing to complete the application pursuant to 37 C.F.R. § 1.53(f) and this, a 37 C.F.R. §§ 1.53 and 1.78(a)(1), indicate that in order to obtain the bolication, either the basic filing fee must be paid, or the processing and reast be paid, within 1 year from the notification under § 53(f).	as well as the changes penefit of a prior U.S.
		То	tal fees enclosed	\$ 750.00
14.	Me	tho	d of Payment of Fees	
	X	Att	ached is a $oxtimes$ check $oxtimes$ money order in the amount of \$	750.00
		Au	thorization is hereby made to charge the amount of \$	
			to Deposit Account No	
			to Credit card as shown on the attached credit card information form PTO-2038.	tion authorization
WAI	RNII	VG::	Credit card information should not be included on this form as it may become	ne public.
			narge any additional fees required by this paper or credit any e manner authorized above.	overpayment in
			A duplicate of this paper is attached.	

15. Authorization to Charge Additional Fees

WARNING: If no fees are to be paid on filing, the following items should not be completed.

WARNING: Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.

The Office is hereby authorized to charge, in the manner shown above, the following additional fees that may be required by this paper and during the entire pendency of this application.

☑ 37 C.F.R. § 1.16(a), (f), or (g) (filing fees)
□ 37 C.F.R. § 1.16(b), (c), and (d) (presentation of extra claims)

NOTE: Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be paid or these claims canceled by amendment prior to the expiration of the time period set for response by the P.T.O. in any notice of fee deficiency (37 C.F.R. § 1.16(d)), it might be best not to authorize the P.T.O. to charge additional claim fees, except possibly when dealing with amendments after final action.

- ☐ 37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)
- ☐ 37 C.F.R. § 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a))
- ☐ 37 C.F.R. § 1.17 (application processing fees)

WARNING:

"...A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).

□ 37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))

NOTE: Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the Notice of Allowance. 37 C.F.R. § 1.311(b).

NOTE: 37 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying, . . . issue fee." From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

16. Instructions as to Overpayment

NOTE:	"Amounts of twenty-five dollars or less will not be returned unless specifically requested within a
	reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may
	be returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).

Credit Account No. 23-0442

□ Refund

Date: Aug. 14, 2001

Reg. No. 41,266

Tel. No. (203) 261-1234

Customer No. 004955

SIGNATURE OF PRACTITIONER

James A. Retter
(type or print name of practitioner
Ware, Fressola, Van Der Sluys &
Adolphson LLP

755 Main Street

P.O. (Correspondence) Address

P.O. Box 224

Monroe, CT 06468

	Inc	orporation by reference of added pages						
	U.S cor PA	eck the following item if the application in this transmittal claims the benefit of prior 5. application(s) (including an international application entering the U.S. stage as a atinuation, divisional or C-I-P application) and complete and attach the ADDED GES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR 5. APPLICATION(S) CLAIMED.)						
		Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed Number of pages added						
		Plus Added Pages for Papers Referred to in Item 4 Above						
		Number of pages added						
		Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.						
		Number of pages added						
		Plus "Assignment Cover Letter Accompanying New Application"						
		Number of pages added						
	Statement Where No Further Pages Added							
		(if no further pages form a part of this Transmittal, then end this Transmittal with this page and check the following item.						
	X	This transmittal ends with this page.						